CLAIMS

Claim 1. (withdrawn): A polymer containing a fatty group pendant to the polymer backbone having the formula:

$$\left(\begin{array}{c} C \\ A \\ R \end{array}\right)^{N} \cdot \left(\begin{array}{c} A' \\ R' \end{array}\right)^{n}$$

where C is a saturated or unsaturated alkyl group with between about 6 and 22 carbons and R and R'are the same or different and are independently chosen from the group containing linear or branched, saturated or unsaturated, alkyl, alkenyl, alkylamine, -NH-, -NR-, or arylalkyl with 0 to 10 carbon atoms and where A and A' are the same or different and are independently chosen from the group containing

Claim 2. (withdrawn): A polymer according to claim 1 wherein A and A' are the same or different and are independently chosen from the group containing $[-(C=0)O-, -O(C=0)NH-, -HN(C=0)NH-, -O-, -OH, -CH_2OH, CH_3, -(C=0)OH, -O((C=0)C=C)_m-, -N(C=O)-, -(O-SiH_2)_m-, -(CH_2)_m-]$ wherein m is an integer greater than zero.

Claim 3. (withdrawn): The polymer of claim 1 wherein the pendant fatty group has an occurrence rate of from 5 ppm to 100%.

Claim 4. (withdrawn): A surface coating comprising a polymer according to claim 1.

Claim 5. (withdrawn): A cast part comprising a polymer according to claim 1.

Claim 6. (withdrawn): An extruded film or fiber comprising a polymer according to claim 1.

Claim 7. (currently amended): A polymer containing a fatty group pendant to the polymer backbone having the formula:

$$\begin{pmatrix} C & & \\ & & \\ A & & \\ R & & R' & A' \end{pmatrix}_{n}$$

where C is a saturated or unsaturated alkyl group with between about 6 and 22 carbons and R and R'are the same or different and are independently chosen from the group containing linear or branched, saturated or unsaturated, [alkyl, alkenyl, alkylamine,] -NH-, -NR-, or [arylalkyl with 0 to 10 carbon atoms] and where A and A' are the same or different and are independently chosen from the group containing

 $[-(C=O)O-, -O(C=O)NH-, -HN(C=O)NH-, -O-, -OH, -CH₂OH, -CH₃, \\ -(C=O)OH, -O((C=O)CO)_m-, -O((C=O)C=C)_m-, -N(C=O)-, \\ -O(C=O)C₆H₄(C=O)-, -O(C=O)D-, -OC(C-OH)D-, -(O-SiH₂)_m-,$

 $-(CH_2)_1$ -] where D is linear or branched, saturated or unsaturated, alkyl, alkenyl, alkylamine or alkylaryl with 0 to 10 carbon atoms, and where l and m are integers greater than zero.

Claim 8. (original): A polymer according to claim 7 wherein A and A' are the same or different and are independently chosen from the group containing $[-(C=0)O-, -O(C=0)NH-, -MN(C=0)NH-, -O-, -OH, -CH_2OH, CH_3, -(C=0)OH, -O((C=0)C=C)_m-, -N(C=0)-, -(O-SiH_2)_m-, -(CH_2)_m-]$ wherein m is an integer greater than zero.

Claim 9. (original): The polymer of claim 7 wherein the pendant fatty group has an occurrence rate of from 5 ppm to 100%.

Claim 10. (original): A surface coating comprising a polymer according to claim 7.

Claim 11. (original): A cast part comprising a polymer according to claim 7.

Claim 12. (original): An extruded film or fiber comprising a polymer according to claim 7.

Claim 13. (withdrawn): A polymer containing a fatty group pendant to the polymer backbone, said polymer having the formula:

Where C is a saturated or unsaturated alkyl group with between about 6 and 22 carbons and R and R'are the same or different and are independent chosen from the group containing $[-(C=0)O-, -O(C=0)NH-, -HN(C=0)NH-, -O-, -OH, -CH_2OH, CH_3, -(C=0)OH, -O((C=0)C=C)_m-, -N(C=0)-, -(O-SiH_2)_m-, -(CH_2)_n-]$ where m is an integer greater than zero.

Claim 14. (withdrawn): A surface coating comprising a polymer according to claim 13.

Claim 15. (withdrawn): A cast part comprising a polymer according to claim 13.

Claim 16. (withdrawn): An extruded film or fiber comprising a polymer according to claim 13.

Claim 17. (withdrawn): A polymer containing a fatty group pendant to the polymer backbone, said polymer having the formula:

$$\left(\begin{array}{c} C \\ O \\ O \\ N \end{array} \right) \left(\begin{array}{c} O \\ N \\ O \end{array} \right) \left(\begin{array}{c} O \\ N \\ N \end{array} \right) \left(\begin{array}{c} C \\ O \\ N \end{array} \right) \left(\begin{array}{c} O \\ N \\ O \end{array} \right) \left(\begin{array}{c} O \\ N \\$$

Where C is a saturated or unsaturated alkyl group with between about 6 and 22 carbons and R and R'are the same or different and are independent chosen from the group containing [-(C=0)O-, -O(C=0)NH-, -HN(C=0)NH-, -O-, -OH, -O-]

CH₂OH, CH₃, -(C=O)OH, -O((C=O)C=C)_m-, -N(C=O)-, -(O-SiH₂)_m-, -(CH₂)_n -] where m is an integer greater than zero.

Claim 18. (withdrawn): A surface coating comprising a polymer according to claim 17.

Claim 19. (withdrawn): A cast part comprising a polymer according to claim 17.

Claim 20. (withdrawn): An extruded film or fiber comprising a polymer according to claim 17.

Claim 21. (withdrawn): A polymer containing a fatty group pendant to the polymer backbone, said polymer having the formula:

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Where C is a saturated or unsaturated alkyl group with between about 6 and 22 carbons and R an R' are the same or different and are independently chosen from the group containing $[-(C=0)O-, -O(C=0)NH-, -HN(C=0)NH-, -O-, -OH, -CH_2OH, CH_3, -(C=0)OH, -O((C=0)C=C)_m-, -N(C=0)-, -(O-SiH_2)_m-, -(CH_2)_n-]$ where m is an integer greater than zero.

Claim 22. (withdrawn): A surface coating comprising a polymer according to claim 21.

Claim 23. (withdrawn): A cast part comprising a polymer according to claim 21.

Claim 24. (withdrawn): An extruded film or fiber comprising a polymer according to claim 21.

Claim 25. (withdrawn): A polymer containing a fatty group pendant to the polymer backbone, said polymer having the formula:

$$\left(\begin{array}{c} C \\ O \\ \\ R' \end{array} \right)_n$$

Where C is a saturated or unsaturated alkyl group with between about 6 and 22 carbons and R an R' are the same or different and are independently chosen from the group containing $[-(C=0)O-, -O(C=0)NH-, -HN(C=0)NH-, -O-, -OH, -CH_2OH, CH_3, -(C=0)OH, -O((C=0)C=C)_m-, -N(C=O)-, -(O-SiH_2)_m-, -(CH_2)_n-]$ where m is an integer greater than zero.

Claim 26. (withdrawn): A surface coating comprising a polymer according to claim 25.

Claim 27. (withdrawn): A cast part comprising a polymer according to claim 25.

Claim 28. (withdrawn): An extruded film or fiber comprising a polymer according to claim 25.

Claim 29. (withdrawn): A polymer containing a fatty group pendant to the polymer backbone, said polymer having the formula:

Where C is a saturated or unsaturated alkyl group with between about 6 and 22 carbons and R and R'are the same or different and are independent chosen from the group containing $[-(C=0)O-, -O(C=0)NH-, -HN(C=0)NH-, -O-, -OH, -CH_2OH, CH_3, -(C=0)OH, -O((C=0)C=C)_m-, -N(C=0)-, -(O-SiH_2)_m-, -(CH_2)_n-]$ where m is an integer greater than zero.

Claim 30. (withdrawn): A surface coating comprising a polymer according to claim 29.

Claim 31. (withdrawn): A cast part comprising a polymer according to claim 29.

Claim 32. (withdrawn): An extruded film or fiber comprising a polymer according to claim 29.

Claim 33. (withdrawn): A polymer containing a fatty group pendant to the polymer backbone, said polymer having the formula:

$$\left(\begin{array}{c} C \\ O \\ O \\ \end{array} \right) \left(\begin{array}{c} C \\ O \\ \end{array} \right) \left(\begin{array}{c} O \\ N \\ \end{array} \right) \left(\begin{array}{c} R' \\ NH \end{array} \right) \left(\begin{array}{c} R' \\ NH \end{array} \right) \left(\begin{array}{c} R' \\ NH \end{array} \right) \left(\begin{array}{c} C \\ N$$

Where C is a saturated or unsaturated alkyl group with between about 6 and 22 carbons and R and R'are the same or different and are independent chosen from the group containing [-(C=0)O-, -O(C=0)NH-, -HN(C=0)NH-, -O-, -OH, -O-]

CH₂OH, CH₃, -(C=O)OH, -O((C=O)C=C)_m-, -N(C=O)-, -(O-SiH₂)_m- , -(CH₂)_n -] where m is an integer greater than zero.

Claim 34. (withdrawn): A surface coating comprising a polymer according to claim 33.

Claim 35. (withdrawn): A cast part comprising a polymer according to claim 33.

Claim 36. (withdrawn): An extruded film or fiber comprising a polymer according to claim 33.

Claim 37. (withdrawn): A polymer containing a fatty group pendant to the polymer backbone having the formula:

$$\begin{pmatrix}
A \setminus P \\
A \setminus R' \\
A' \\
P' \\
E$$

where E is an anion, C is a saturated or unsaturated alkyl group with between about 6 and 22 carbons and R and R'are the same or different and are independently chosen from the group containing linear or branched, saturated or unsaturated, alkyl, alkenyl, alkylamine, -NH-, -NR-, or arylalkyl with 0 to 10 carbon atoms and where A and A' are the same or different and are independently chosen from the group containing

Claim 38. (withdrawn): A polymer according to claim 37 wherein A and A' are the same or different and are independently chosen from the group containing $[-(C=0)O-, -O(C=0)NH-, -HN(C=0)NH-, -O-, -OH, -CH_2OH, CH_3, -(C=0)OH, -O((C=0)C=C)_m-, -N(C=0)-, -(O-SiH_2)_m-, -(CH_2)_m-] wherein m is an integer greater than zero.$

Claim 39. (withdrawn): The polymer of claim 37 wherein the pendant fatty group has an occurrence rate of from 5 ppm to 100%.

Claim 40. (withdrawn): A surface coating comprising a polymer according to claim 37.

40. Claim 41. (withdrawn): A cast part comprising a polymer according to claim 37.

Claim 42. (withdrawn): An extruded film or fiber comprising a polymer according to claim 37.

Claim 43. (withdrawn): A polymer containing a fatty group pendant to the polymer backbone having the formula:

where E is an anion, C is a saturated or unsaturated alkyl group with between about 6 and 22 carbons and R and R'are the same or different and are independently chosen from the group containing linear or branched, saturated or unsaturated, alkyl, alkenyl, alkylamine, -NH-, -NR-, or arylalkyl with 0 to 10 carbon atoms and where A and A' are the same or different and are independently chosen from the group containing

[-(C=O)O-, -O(C=O)NH-, -HN(C=O)NH-, -O-, -OH, -CH₂OH, -CH₃, -(C=O)OH, -O((C=O)CO)_m-, -O((C=O)C=C)_m-, -N(C=O)-, -O(C=O)C₆H₄(C=O)-, -O(C=O)D-, -OC(C-OH)D-, -(O-SiH₂)_m-, -N(C=O)C₆H₄(C=O)-, -O(C=O)D-, -OC(C-OH)D-, -(O-SiH₂)_m-, -N(C=O)C₆H₄(C=O)-, -O(C=O)D-, -OC(C-OH)D-, -(O-SiH₂)_m-, -N(C=O)C₆H₄(C=O)-, -O(C=O)D-, -OC(C-OH)D-, -(O-SiH₂)_m-, -N(C=O)D-, -O(C=O)D-, -O(C=O)

 $-(CH_2)_1$ -] where D is linear or branched, saturated or unsaturated, alkyl, alkenyl, alkylamine or alkylaryl with 0 to 10 carbon atoms, and where l and m are integers greater than zero.

Claim 44. (withdrawn): A polymer according to claim 43 wherein A and A' are the same or different and are independently chosen from the group containing $[-(C=0)O-, -O(C=0)NH-, -HN(C=0)NH-, -O-, -OH, -CH_2OH, CH_3, -(C=0)OH, -O((C=0)C=C)_m-, -N(C=0)-, -(O-SiH_2)_m-, -(CH_2)_m-]$ wherein m is an integer greater than zero.

Claim 45. (withdrawn): The polymer of claim 43 wherein the bromo-nitro group has an occurrence rate of from 5 ppm to 100%.

Claim 46. (withdrawn): A surface coating comprising a polymer according to claim 43.

Claim 47. (withdrawn): A cast part comprising a polymer according to claim 43.

Claim 48. (withdrawn): An extruded film or fiber comprising a polymer according to claim 43.

Claim 49. (withdrawn): A polymer comprising a monomer having at least one pendant fatty group, either saturated or unsaturated, branched or linear from about 6 to 22 carbons wherein the polymer is the reaction product of a polyisocyanate with a polyol, the polyol or polyisocyanate containing the pendant fatty group.

Claim 50. (withdrawn): A polymer comprising a monomer having at least one pendant fatty group, either saturated or unsaturated, branched or linear from about 6 to 22 carbons wherein the polymer is the reaction product of a polyisocyanate with a polyamine, the polyamine or polyisocynate containing the pendant fatty group.

Claim 51. (cancelled).

Claim 52. (currently amended): A hydrophobic polymer with a urea backbone containing an alkyl chain of from around 6 to around 32 carbons pendent to a polymer backbone.